APPENDIX A

List of Acronyms

ADA	Americans with Disabilities Act
BMP	Best Management Practice
BOS	Board of Supervisors
CBLAB	Chesapeake Bay Local Assistance Board
DCR	Department of Conservation and Recreation
DEQ	Department of Environmental Quality
DPWES	Department of Public Works and Environmental Services
EQAC	Environmental Quality Advisory Commission
F&R	Fire and Rescue
FCPA	Fairfax County Park Authority
FEMA CRS	Federal Emergency Management Agency Community Rating System
GASB	Government Accounting Standards Board
НРО	High Performance Organization
IBI	Index of Biological Integrity
IT	Information Technology
LTE	Limited Term Exempt
MSMD	Maintenance and Stormwater Management Division
OSDS	Office of Site Development Services
PFP	Pay For Performance
RIF	Reduction In Force
SPS	Stream Protection Strategy
STW	Stormwater Management Business Area
SWOT	Strengths, Weaknesses, Opportunities, and Threats
SWPD	Stormwater Planning Division
TMDL	Total Maximum Daily Load
VDOT	Virginia Department of Transportation
VPDES	Virginia Pollution Discharge Elimination System

APPENDIX B

Results of SWOT Analysis

STRENGTHS

1.	Emergency response.		
2.	Versatility in tasks/programs.		
3.	Institutional knowledge.		
4.	Not overly perfectionist → get more done/balancing rules, responsibilities and risks.		
5.	Talented workforce.		
6.	Good problem-solving skills → make things wor	k.	
7.	Ability to reallocate resources within programs		
8.	Can do attitude "where there is a will there is a w	ay."	
9.	Good fiscal control.		
10.	(Tie) Incorporate technology and innovation.		
	(Tie) In tune with existing impending regulations	S.	
0.1	(Tie) Diversity (people and opinions).		
Other:	 Good outreach to community. 	Doing more with less.	
	 Responsive to community. 	Organizational policies and regulations.	
	Employee Involvement.	Atmosphere of education and training (to	
	 Good balance between old and new 	some degree).	
	staff.	Ability and desire to learn.	
	 Volunteer services to outside causes. 	 More willing to take risks. 	
	 Practical and realistic. 	 Leadership support (BOS, County 	
	 Attract quality staff/recruiting efforts 	Executive).	
	effective.	Realistically evaluate new ideas.	
	Good infrastructure organizational	Open to change.	
	support.	Stability of Fairfax County Government.	
	 Everyone gets along/good working relationships. 	Pool of consultants and contractors available.	
	Mature workforce.	Reliable historical data.	
	Reorganization has fostered	In STW Planning, there have been	
	collaboration between planning and	sufficient funds.	
	maintenance.	Recognized leaders in the field (in	
	More recognition and influence due to various fields).		
	reorganization – joining maintenance • Awareness of external forces.		
	and planning under "Stormwater." • Good morale in Stormwater		
	Relationships/partnerships with those Management Branch.		
	outside Stormwater.	Work well in teams.	
	 Emergency response – do not respond 	Responsive to community.	
	"knee jerk" to political pressure.	Highly motivated, committed,	
	 Proactive programs. 	productive, dedicated staff.	
		Safety conscious.	

WEAKNESSES

	WEAKNES		
1.	Limited Term Exempt employees create scheduling		
	creates low morale – historical knowledge is lost when LTEs leave.		
2.	Inter-departmental cross-cutting outreach across cunderstanding.	county divisions – lack of communication and	
3.	Lack a sense of identity: what do we do for both t	he community and other county agencies.	
	"Stormwater" leads to various interpretations.		
4.	(Tie) No dedicated funding source to accomplish what needs to be done. No way to fund strategically and in right order.		
5.	(Tie) Opportunities for upward mobility are limited	ou.	
6.	(Tie) Overall outreach efforts lacking. Pubic does actually best.(Tie) Policy level lack of integration between OSI development process).	7	
7.			
8.	History of being reactive vs. strategists – governm	nent culture breeds the reactive stance.	
9.	(Tie) Losing too many well-qualified people to retirement – not being able to replace due to inadequate pay compared to other opportunities. (Tie) Projects driven by political influence vs. needs of community.		
10.	Focus on particular job.	ous of community.	
11.	Fixes of infrastructure are often short-term, not lo	ing-term. Costs more in long run	
12.	Times of infrastructure are often short term, not to	ing term. Costs more in long run.	
13.	Weakness in cross-training; if someone leaves, don't have someone to move into job effectively – Rely too much on individual specialists, who if leave would really hurt organization.		
Other	 Team paradigm still needs to fit within command and control structure. Hampers some innovation and initiatives. DPWES reorganization has led to "dis" organization for many there's a lack of communication. Lack of programmatic integration both in branch and between divisions and departments. Past, didn't get public buy-in to plans. Have fixed process, but still living with ramifications. Lingering perception is that the County is inflexible when it comes to regulations. Recruitment problem rather than retention. 	 Have to go very far away to recruit means less vestment in work as it relates to local community. Internal communication breakdowns between working level and engineers and field staff. Management is so busy with outside meetings and coordination trying to react that they have little time to focus on actual management. Projects driven by political influence vs. needs of community. County values: "we value our employee" flies in the face of how LTEs are treated. 	

OPPORTUNITIES

	OHORIONI		
1.	(Tie) Political support from the BOS		
	(Tie) Healthy citizen interest in the environment		
2.			
3.	(Tie) Proactive watershed planning as appropriative – public support (funding). Proactively coordinate regs and go above and beyond (Tie) Federal/state grant opportunities, outside funding		
4.			
5.	(Tie) Heightened awareness due to negative visible degradation, etc) (Tie) Retrofitting of stormwater management facility redevelopment/revitalization plans.	_	
6.			
7.	(Tie) The environmental stewardship of the County executive's vision and mission (Tie) Collaboration with external councils and commissions that have a vested interest in environmental issues		
8.			
9.	(Tie) Changes to County's organizational structure (Tie) The countywide focus on strategic planning alignment, collaboration, etc. (Tie) Build on past successes		
Other	 Supportive comprehensive plan policy (environmental plan). Chesapeake Bay 2000 goals. Federal mandates support of water quality improvements. Take advantage of changes to state Chesapeake Bay Regulations-supportive of riparian initiatives and other changes as they occur. Increase interagency communication/coop (Park Authority). 	 Visibility of work product. Cooperate on regional level. External – build on existing activities of environmental groups. Existing natural resources (stream valleys). 	

THREATS

THEETTS			
1.	Lack of consistent funding source and loss/reduction of funding – competing with County (schools,		
	F&R, IT).		
2.	Frequent changes and misuse in management philosophy, e.g., HPO – next?		
3.	Overly high citizen expectations given resources.		
4.	Development community pressure, e.g., oppositio	n to regulation, poor construction/inspection.	
5.	Lack of political and well organized grass roots by	uy-in/support for current programs.	
6.	Changing/new regulations (unfunded mandates) T	TRIB Sheet, TMDL, ADA, GASB, DAM (VA)	
7.	RIF/staff reduction.		
8.	Poor support/coordination with other County and	outside Departments, e.g., FCPA, VDOT, (lack	
	of unified County vision, strategy).		
9.	New initiatives (West Nile/public health/terrorism	n) emotions high, short notice – unplanned.	
10.	Facility limitations.		
11.	Privatization (perceived savings).		
Other	 Changing weather patterns, i.e., new TP-40 (rev.) current organizational alignment. Change in political climate, e.g., new BOS, Governor, etc. Tax Revolt(s). Transportation inadequacy. Population demographics coupled with changing expectations + work force. "Failure" of PFP (morale, competitive pay, retention/recruiting). Lack of knowledge of out total programs and responsibilities – stakeholders. 	 Perception of fat/waste in programs. Dillon rule – hands are tied. Indifference to organizational change (outsiders don't care how needs are met – just meet them). Undefined level of service. Refusal by state and other agencies and neighboring jurisdictions to collaborate. Shortage of sound science to accomplish mission. State of economy. 	

APPENDIX C

Results of External Stakeholder Interviews

Q1: What have been our major accomplishments over the past five years? What action(s) can we take to leverage these accomplishments?

Area	Response	
Innovation	 (1) Gradual acceptance at the staff and leadership levels of more innovative techniques in stormwater management; acknowledgement of possibilities other than structural BMPs. Most difficult has been to convince MSMD; however, this has also been the area of greatest improvement. (2) Inviting Prince George's County to talk about experiences in innovative BMPs. (3) A more open atmosphere regarding finding innovative solutions to issues and problems and a liberalization of BMP requirements to allow for innovative techniques and non-engineered solutions. (4) Tentative acceptance of innovative BMPs. 	
	Allowing trees and other vegetation to be planted in stormwater management facilities.	
	 Participation in the Infill and Redevelopment Study that resulted in stormwater-specific recommendations. 	
Program	Tree preservation efforts have made a lot of forward progress.	
Development	Re-mapping of Fairfax County's streams.	
	 Increased sensitivity to biological/ecological concerns. Demonstrated through participation in the Sugarland Run biological assessment. 	
Stream Protection Strategy	 (1) Getting the BOS to fund the SPS Baseline Study and to move forward with watershed plans. (2) The SPS Baseline Study. (3) The SPS Baseline Study. (4) Moving forward with the Stream Protection Strategy. 	
	 Making a better effort to reach out to non-profits and community groups who can be allies in obtaining funding/achieving buy-in for planning. 	
Partnerships	Partnering with other entities to engage in stabilization of degraded streams.	
	DNA typing for fecal coliform bacteria sources related to TMDLs. While the County wasn't the lead, the partnership resulted in valuable data.	
Internal Communications	 Hiring a person who attends meetings of the Environmental Crimes Task Force. Has resulted in improved communications. 	

Q2: What have been our major shortfalls over the past five years? What actions can we take to minimize the impact of these shortfalls?

Area	Response	
Planning	• (1) Much of the County's stormwater planning is done on an ad-hoc basis and as a result, the system is not cost-efficient. (2) Planning is done on a property-by-property basis with little regard for the ultimate design. (3) Less and less confidence that regulators have a comprehensive view on what it is that they are doing or trying to achieve. Some regulations probably contribute little to stormwater quality.	
	• (1) Not having an up-to-date comprehensive stormwater management program for the County. Implementation of the existing regional stormwater management plan has been limited – this should have been updated long ago. Have a plan but no effective way to implement it. (2) Not sure what is happening with regional ponds.	
	 Stormwater management recommendations of the Infill and Redevelopment study are not completely adequate. 	
	 The County has not paid nearly enough attention to reducing impervious surface areas that are the root of most stream degradation and the need for structural controls. 	
	 Inability to respond to the problem of streams being impaired for bacteria, which has lead to the implementation of TMDLs. 	
	 There is a lot of focus on local streams, without always looking to see how larger regional issues such as the Chesapeake Bay Agreement might impact how things are done. 	
Innovation	 (1) Reluctance to accept new ideas. Too great a reliance on what is in the PFM. (2) Difficulty in getting innovative practices approved. The County is holding the industry back on innovative techniques by insisting on only going half way. (3) Lack of implementation of new and innovative approaches to stormwater management. 	
	 Not allowing the use of bioretention facilities on private lots has been a big problem and sets these facilities up for failure. 	
	 Not allowing trees to be planted within the BMP basin when water depth allows it. 	
	 (1) Lack of coordination between the MSMD and the Office of Site Development Services especially regarding implementation of the 2000 innovative BMP guidelines. (2) There is too much of a split between OSDS and MSMD. If the plan is approved, then MSMD needs to accept it an not present additional questions or changes to the developer. 	
Organization	 Scattershot review and approval process for innovative stormwater management techniques. 	
	 Perspective is that things are a lot more complex due to over regulation. 	
	 Reporting of routine inspection activities could be strengthened to make other agencies aware of potential future issues and to maximize the efficiency of field operations. 	
Program Development	 Haven't adopted the 1999 Department of Conservation and Recreation Stormwater Management Manual. Here we have a State-wide manual, but it is not accepted by the County. 	
	 The County's existing digital floodplain information is not very good. Fairfax was ahead in the 1970s and then got way behind. 	
	The County still doesn't have an adequate erosion and sediment control program.	
	Don't have the staff or funding to monitor or maintain BMPs for which the County is responsible.	
Partnerships	Reluctance to acknowledge the contributions of outside groups.	
Funding	Single most important shortfall is the failure to secure a dedicated funding resource.	

Actions to minimize shortfalls:

- Develop a more focused plan that lays out reasonable expectations and them implement the plan. Don't continually second-quess approaches.
- Innovative BMPs need to actually be incorporated in the PFM.
- The regional ponds issue needs to be addressed one way or another soon in order to stop decisions from being made in a vacuum.
- The County's entire approach to erosion and sediment control needs to be re-thought.
- Need to emulate Loudoun County and update and provide digital floodplain studies for the entire County.
- The County needs to document and publish its data more frequently.
- Secure a dedicated funding source.
- Need to formalize the County's ability to take a macro-view of stormwater issues (EPA, TMDLs, NPDES, etc.).
- The County needs to perform an economic analysis of regulations and policies to make it clear how much stormwater management is costing us, and to provide citizens and politicians with an opportunity to decide whether this is the best use of funding. Engage the private sector to arrive at a balanced view.
- The County needs to have a more systematic and logical approach to stormwater management.
- We need to have a dedicated research program to help us determine the best courses of action. In the long-run, this will save us money.
- Create a better feedback loop between OSDS and MSMD to ensure that MSMD concerns over design impacts on maintenance are taken care of before site plan review and approval.

Q3: What are our major strengths? How can we capitalize on these strengths strategically and operationally?

Area	Response
Technical Staff/Employees	• (1) Technical staff are pretty competent. (2) Employees are a major strength. They are interested and motivated. (3) Very dedicated staff, generally have had positive experiences. (4) Young energetic group of employees who are very knowledgeable in their fields. (5) Good quality staff. (6) Overall, good solid people who are willing to work under tough budget conditions and lots of unfunded mandates.
	Very good stream analysis team.
	Excellent floodplain engineers.
	High degree of sophistication, which affords many opportunities not available in other jurisdictions.
Organization	Willingness to meet in person – while we might not like the answers – staff is willing to engage stakeholders.
	Another strength is the Environmental Coordinating Committee.
	Leadership at the very top levels of DPWES is open minded and very active.
Leadership	Good leadership and an interest in the public good at the department and division levels. Leadership is a little less solid as one goes further down the chain of command.
Partnerships	Willingness to partner with other entities on important projects.
Resources	Decent resources.

Actions to capitalize on strengths:

• Capitalize on technical staff/employees by giving them the freedom to use their heads and not be tied to the political process.

Q4: What are the major external factors – economic, political, regulatory, geographic, demographic, and competitive – that will affect us over the next five years? What actions can we take to effectively deal with them?

Area R	esponse
	 Political environment, i.e., Board of Supervisors, will dictate the mission and the ability to finance plans.
	Clearly the budget is the biggest external factor.
Political/Economic	 The Board of Supervisors failure to consider a stormwater utility has been a tremendous blow to the stormwater program. It will take a lot of political will, but don't see this happening in the next few years.
	 Biggest is the combination of economics and politics. Stormwater program needs money, the problem is how to use the political process to get this money.
	Reluctance of the Board of Supervisors to implement a utility fee.
	 Regulatory change from the State and federal levels. Example are the recent amendments to the State Chesapeake Bay Preservation Regulations.
	 Current Chesapeake Bay Preservation Ordinance issues will have a substantial impact on the number of areas regulated by the County.
	 Difficulty in enforcing erosion and sediment control measures. It is a budget issue in that more staff is needed, but it is also a management issue in that there is probably more that can be done with existing staff.
Regulatory	• TMDLs and getting a hold of that whole process before it takes on a life of its own. Chesapeake Bay Agreement and Tributary Strategies - load allocations are due in April, and out of that will come nutrient and sediment load caps. Revised Chesapeake Bay watershed standards will be moving forward and are likely to lead to revisions to the State's 303(d) impaired waters list. This could set the stage for even more TMDLs. The Bay Program at the federal level will take on a more regulatory flavor. More TMDLs will need to be developed for benthic impairments. This will be a huge challenge since the answer will largely be to control a combination of pollutants rather than one single pollutant.
	 As redevelopment of lower density areas to higher densities occurs, there will be a greater potential for dumping and runoff to affect local streams.
Demographics/Development	 Demographically, if the County continues to grow, there will be more and more impervious surface cover to manage.
2 309.4637 2010106	 The County is built-out. The PFM and other regulations are oriented towards large scale new development. We are moving into an infill and redevelopment mode and will be developing parcels that were once passed over due to their less than desirable conditions.
Other County Agencies	 Needs to be a greater connection between OSDS and STW.
Public Perception	 Public perception is that all the STW does is study. STW is following the same path with its watershed planning process. All the money will be used up in the planning and then there won't be anything left for effective implementation. The result will be lowered expectations.

What actions can we take to effectively deal with them:

- From a fiscal standpoint, we should consider other, more stable funding sources.
- The major action to deal effectively with these issues is financial, what funds will be available.
- Need to generate additional funds through new development to help offset the impacts on older development.
- Planning for offsetting impacts should be through an extension of the SPS process.
- Need to find more innovative ways to fund. To do this, the STW needs to build a stronger constituency.
- Should look to what other counties have done with respect to stormwater utility. It is no longer a new and/or bold concept. It is a fact of life that these things need to be paid for.
- One technique is a stormwater utility. Staff needs to figure out how to get the political support.
- The County should pick one or two watersheds to study, plan, and fix and make it a model to foster support. Make people see how well it can work if adequately funded and make them want to have the same.
- Need to be able to communicate and have examples of what the benefits are. Large HOAs might be a particular target, since many of them already manage their own systems and would be likely to reject a utility.
- Legal issues include when a developer is entitled to get bond money back for erosion and sediment control facilities.
- The County should consider some sort of enterprise fund so that it has the capacity to react to all these new demands. Eventually, TMDLs, Chesapeake Bay Agreement, Tributary Strategies, and NPDES MS4 will all be tied together.
- The Stream Protection Strategy should position the County well, but the County will need to look at retrofits and rehabilitation.
- The County will need to shift its focus and momentum from a new development standpoint to a redevelopment and infill standpoint. Not sure if this change is happening fast enough, particularly with regard to the PFM.
- Time is right for a performance based PFM to allow for more agility. This all fills into the need for more research.

Q5: What are the major opportunities that lie before us in the next five years? What can we do to capitalize on these opportunities?

Area	Response	
	We are in a situation where we are almost a mature County. However, there will be continued changes and how we manage these changes will be important.	
Program Development	 Complete and follow-up on stream assessments. Use the momentum that these efforts have created to actually implement recommendations and remedial actions. 	
	Research. Take a step back and do something coordinated.	
	There might be an opportunity to reduce impervious surfaces due to an increasing interest regionally in smart growth.	
Policy and	Prune regulations.	
Regulation	 There are many serious situations that need to be addressed or they will become more serious. Legislate through plans and ordinances the use of low impact development to ensure that sensitive natural resources are protected from runoff. 	
Stakeholder Involvement	• (1) Opportunity to education the public. Particularly children. County should embrace things like this. (2) There is a lot of public awareness that streams are important.	
	Opportunity for stormwater utility. Staff people need to convince the Board that this needs to be done.	
Funding	 To join forces with other local governments and the State to go after highway money to deal with stormwater. Transportation now is linked with clean air, why not clean water? Could be a major source of revenue. 	
Innovation	We have the opportunity to be creative. One way or another, the next few years will set the tone for a long while.	

What can we do to capitalize on these opportunities:

- Now is the time to plan.
- Work in greater partnership with the Park Authority and nature centers. Link flora and fauna with other environmental issues such as stormwater.
- The County should capitalize on [interest by the public in smart planning] by looking at the Comprehensive Plan and the Zoning Ordinance and amending as needed. Need to look at cluster zoning provisions particularly hard for how it can both protect and be a problem for stormwater quality.
- The STW needs to take that [public] awareness and show that the situation can actually be improved.

Q6: What are the major risks to our continued growth and our successful operation? What can we do to resolve them or contain their impact?

Area	Response
Planning/Program Development	• (1) As the County matures, there will be more emphasis on maintenance and retrofit. (2) Risk in not maintaining what we have, will cost more later if we don't.
	The current programming is not successful. As is, there are numerous instances of severe downstream impacts by development. Stormwater management takes careful implementation from initial development plans through actual development to ensure minimal impacts. Continued deteriorization of streams will make resolution of the problem more difficult in terms of funding and implementation. The longer you let it deteriorate, the more expensive it becomes and the greater the chance that political leadership will give up.
	 Lack of education on the part of the citizenry, both in terms of willingness to fund efforts as well as actual impacts to the stormwater system and the difference between the sanitary and storm systems.
	 The Board of Supervisors is the major risk. If the Board doesn't know what you are all about, then they are unlikely to increase budgets. Most people aren't aware of the good things that have been done to date.
	 Perception that the STW is inefficient. The Regional Pond study is one example. Has dragged on for years. The politicians notice these sorts of things. The STW doesn't scope out work effectively. Right now, the STW seems to want to do something for everyone, and the result is that not much is getting done.
	We will continue to build facilities that do not work well together. Eventually, we will start to go backwards as we are unable to maintain and/or justify our systems. Pollution will get worse.
	Lack of money is the major risk - not enough to do what needs to be done.
Funding	Money is the single biggest risk - politicians don't get elected running on a stormwater platform.
	Budget stagnation.
Innovation	There is a risk if we fail to develop new technology as challenges become greater and greater.

What can we do to resolve them or contain their impact:

- Maintenance needs to be a stronger consideration in the future and the County needs to plan for this eventual
 conversion. The quality of construction today will dictate how hard a job maintenance will be in the future.
- We really need to cost up the solutions and come up with an honest price on logical answers.
- Need to address education more proactively, especially with those who do not speak English as a primary language. Much of the educational effort will fail if multi-lingualism is not taken into account.
- The County needs to set and stick to its deadlines.
- Need to prioritize and focus.
- Both divisions in the STW needs to create some success stories and blow their own horns. Can capitalize on what has
 already been done, but need to create new successes as well. Develop success stories and get them into the face of
 the public.

Q7: Who are our major stakeholders? Are there additional stakeholders that should be served? If so, which and why?

Area	Response
	The major stakeholder that is currently underserved is the immigrant population. Educating these immigrants on environmental issues will be critical to the County's efforts in the future.
Citizens	 People who don't pay attention because they don't know the problem is out there. Public education is key, and the County should look for ways to involve more citizens in monitoring and even enforcement of regulations.
	The real question is how to get the average person involved. We haven't taken the larger issues to the public.
Private Industry	Consultants/private industry. Building industry. They are perceived to be at odds with the County. The County needs to develop its success stories with the building industry so that each can take credit. With respect to who need to connect to more? Need to connect with the actual homebuilders, not the corporate conglomerates, and smaller builders. They might be more willing to do something more innovative since they are locally based.
	Developers/construction industry.
	 Northern Virginia Building Industry Association, National Association of Industrial Office Properties, Chamber of Commerce.
	The Department of Environmental Quality should be more involved. Both DEQ and the County are responsible for not engaging each other better. Army Corps of Engineers should also be more involved, but they are really hurting for staff.
State/Federal	Need to interface more with federal employees who are also involved in environment/stormwater management and use them as an asset, or for advocacy.
	Individuals with an interest in the larger Bay community.
Community Associations	Community associations. They own a lot of the land on which stormwater management efforts will eventually need to occur.
ASSOCIATIONS	HOAs, particularly those that maintain their own stormwater management ponds.
Civic Groups/Environmental	Fairfax Federation of Citizens Associations, Audubon Naturalist Society, Sierra Club, League of Women Voters.
Groups	Environmental and community groups.
All Underserved	All stakeholders have an interest: individuals, developers in so far as their investment is concerned, businesses in that they tend to have large impervious surfaces that impact water quality, and downstream residents who have to live with the effects of upstream development. The County hasn't paid sufficient attention to any of the stakeholders. They are willing to be pulled along, but not proactive in most areas. Too much day to day focus. Not enough time to look forward to propose new programs or processes.

Q8: What must we do to achieve continuing vitality and support? Are new directions required? What are they? Why are they needed?

Area	Response
Planning and Follow-Through	 The vitality is only focused on a couple of specific projects. The County need to encourage programs that look to the future to ensure protection. Good plans must be pursued, and continuing support will come if stakeholders actually see results.
	 Need to be holistic in approach, engage the private and public sectors in planning and actual implementation.
Education	 Need to engage schools and citizen groups to actually get into the streams - need hands on experiences.
	 Citizens are concerned and will likely support actions toward protection but they need to see what they are paying for and feel comfortable that something is actually being accomplished.
Partnerships	 Need to be open minded, creative, and good listeners. In order to do this, it is necessary to establish public-private partnerships.
Flexibility	Flexibility.
Funding	 Need funding mechanism to retrofit existing facilities and need the political will to do this. Half of the County's BMPs are improperly maintained or improperly installed. The system needs to be maintained or else staff will lose support.

Q9: What are the three most important tasks that we must face over the next 5 years? Why are they important?

Area	Response
Planning	(1) Need to have a better handle on how the County will plan to improve stormwater problems through redevelopment. Need to have comprehensive, and relatively specific plans for how this will happen. (2) Do something about redirecting momentum to infill and redevelopment from new development. (3) Maintain the system and enhance it through new development and redevelopment.
	• (1) Come to resolution on how the County will proceed with the regional pond system. The County really needs a new plan. (2) Resolution of the regional pond question - whether they are good or bad and what policy to ultimately pursue. Concern is that stormwater waivers for developments were granted with the idea that regional ponds were planned. However, in the meanwhile, there has been a tremendous impact on local streams. If ponds are not going to happen, then the County must go back and retrofit these areas as a top priority.
	• Developing a watershed plan that is implementable and has public support. Start a pilot. This will allow the County to learn from its mistakes rather than repeating them 30 times.
	 Conforming stormwater program to long term watershed planning taking into account TMDLs and other regulatory structures including Tributary Strategies and the Bay Program.
	Establish a research capability.
	The County needs to have someone looking at the organization from a total system view. Look not only at controlling impacts, but also looking at sources including transportation, etc.
	 Pay more attention to erosion and sediment control and reducing impervious surfaces. These are the things that make it necessary to manage impacts in the first place. Incorporate all these plans into implementation tools such as the Comprehensive Plan and the Zoning Ordinance. Tie all of these together.
Funding	Stormwater management fee, to get a steady stream of income. This will be critical in the long term for implementation, and must be preceded with education.
	 Need to determine how stormwater management will be financed, and be creative about funding sources.
	 Need to be willing to invest in the program, and there must be a willingness to find ways to fund what needs to be done.
	Secure a dedicated source of revenue to actually implement planning.
Education	Strengthen the County's efforts to educate the citizenry on the difference between the sanitary and storm sewer systems.
	Establish a visible and regular vehicle or channel for communications with the public.
	Take the immigrant population into account in educational programs. Bring the programs to them.
Innovation	(1) Allow/make it easier to implement innovative BMPs. (2) Reduce the hardcore reliance on the statement "it must be in the PFM."
	 Assurances that new development has minimal impacts on downstream waters through local impact development techniques.
Organization	Fix internal review/inspection and maintenance problem. Once a plan has been accepted and approved, maintenance shouldn't be able to say you can't do something. Approval should be the last shot. Fix this with a better feedback loop from maintenance to OSDS.

Q10: What is your perception of the current climate in the organization? What are the greatest issues you see in the organization? What would you like to see change? Continue? Stop?

Area	Response
Conflict	Haven't seen any real conflict among staff. There does seem to be a line between younger staff and old-line thinking.
	 Stress of change. Everyone has regular jobs to do, but recently, there has also been the introduction of Core Values, which seems to have created some internal strife. Hope that these outside planning efforts don't undermine what needs to be done or take too much time away from other work. Personnel reviews take a lot of time. All together, strategizing and organizing can get overwhelming.
	Get a sense that STW and Office of Site Development Services are at each others throats.
Good/Improving	Have always been very responsive to requests. No problems.
	• The climate has improved from very negative in terms of accepting new ideas. Would like to see this continue. Temper the engineering mentality of the organization with biologists and planners. This is happening slowly and should continue.
Leadership	Can't figure out who is in charge. Cant figure out the relationships between the different players and divisions.
	 Bureaucratic. View that the County feels that its employees need to be better empowered. However, the County needs to be very careful in moving forward with this. It could result in even less coordination. And, not even sure if many of the employees even want this empowerment.

Q11: What are the greatest issues you see in the management group? What would you like to see change? Continue? Stop?

Area	Response
Decision-Making	 There seems to be a divide between the County staff and the developers. Sometimes, personal feelings about a development project get in the way. Staff need to have a can-do attitude, and if a developer has proposed something that is legally doable, County staff needs to help make it work within the confines of the rules and regulations.
	 Somewhere between division level and department level, go from technical to policy. The County's political leadership tends to impose sub optimal solutions on the technical community. The solution is to have better research to back up decisions. There is currently not good research information to push decisions one way or another. As a result, decisions are mediocre.
Leadership	 Need to follow through more. Many issues start with a bang, but then don't come to any cohesive conclusion. Even if the answer is that we are not going to do something, an actual decision should be made.
	Buy-in from subordinates. Don't know if there is buy-in at all levels of management, and this permeates to the rank and file.
	 The County can't afford management that is go along to get along, especially in this area. Management must recognize that this is not a static area. It must be dealt with aggressively or it will get much worse.
Innovation	Some managers lack creativity and a willingness to tackle forward thinking solutions. Some training could overcome this.

Q12: What would you expect the organization to look like in five years?

Response

- Hope that there would be adequate staff to maintain the current level of effort and funding to do planning as the system gets older and the maintenance burden gets larger. There should be funding to do more proactive maintenance, rather than chasing problems after they have occurred.
- Lean, mean, flexible machine. Is a perception that the rank-in-file is not very reachable after 4:30 PM. Need to overcome this perception and get rank-in-file involved in outside meetings and coordinating with the public as well.
- I expect that the organization will look like it does now. I hope that it will have a good deal more of a biological bent to it. Hope that we have adequate funding and that our efforts turn to retrofitting. This is almost by necessity as the County builds-out and this will require the County to look seriously at new technologies and techniques that are better suited to retrofit.
- Separate plan review totally from operations and maintenance. There is too much second guessing on part of
 maintenance division after all other approvals have been met. All County projects need to be reviewed like everyone else.
 This would help the County to fix the review process. They would get frustrated too.
- Expect is to be similar to what it looks like now. Hope, however, that managers at all levels would be more industrious and forward looking, and fully aware of the necessity for timely action and resolution of stormwater issues. If the leadership can get excited about what they are doing, this will pervade the entire business area.
- If the County had a viable independent fund, it would develop the watershed management plans and start to actually implement action strategies.

APPENDIX D

STW Related Comprehensive Plan Objectives and Policies

Environment, Objective 2 "Prevent and reduce pollution of surface and groundwater resources. Protect and restore the ecological integrity of streams in Fairfax County."

Policy a. Maintain a BMP program for Fairfax County and ensure that new development and redevelopment complies with the County's BMP requirements.

Policy b. Update BMP requirements as newer, more effective strategies become available.

Policy d. Preserve the integrity and scenic and recreational value of stream valley EQCs when locating and designing storm water detention and BMP facilities.

Policy f. Where practical and feasible, retrofit older stormwater management facilities to perform water quality functions to better protect downstream areas from degradation.

Policy g. Monitor the performance of BMPs.

Policy i. Monitor Fairfax County's surface and groundwater resources.

Policy k. For new development and redevelopment, apply low-impact site design techniques such as those described below [omitted], and pursue commitments to reduce stormwater runoff volumes and peak flows, to increase groundwater recharge, and increase preservation of undisturbed areas.

Transportation, Objective 1 "Fairfax County should provide for both through and local movement of people and goods through a multi-modal transportation system that places the maximum practical emphasis on alternatives to the single-occupant vehicle."

Policy a. Plan for motorized and non-motorized transportation facilities and services in accordance with transportation elements indicated in the Transportation Plan Map.

Policy c. Accommodate inter-County and through trips with the Interstate and Primary Highway Systems, Metrorail, the Virginia Railway Express, and high occupancy vehicle facilities.

Policy d. Design transportation facilities and provide services to accommodate the needs of the mobility-impaired.

Transportation, Objective 2. "Fairfax County should seek to increase the number of commuters using non-motorized transportation and public transportation (i.e., rail, bus, carpooling, and vanpooling) so that by the year 2000, 60% of County commuters to the metropolitan core, 20% of the commuters to the Tysons Corner Urban Center, 15% of the commuters to Suburban Center and Transit Station Areas and 5% of other County commuting work trips will use public transportation, and 3% of all trips will be made by non-motorized (pedestrian and bicycle) transportation.

Policy b. Provide mass transit facilities (such as rail transit, commuter rail and/or HOV lanes) in major radial and intracounty commuter corridors including the Shirley Highway, I-66, the

Fairfax County Parkway, the Beltway, and the Dulles Access/Toll Road. Preserve rights-of-way for track and station sites where appropriate. Base the selection of the preferred mode in each corridor upon the results of detailed corridor studies.

- Policy d. Establish and/or expand park-and-ride lots along major intercounty and intracounty corridors and at potential future modal transfer points such as rail stations in order to promote transit and HOV usage.
- Policy g. Provide non-motorized access (e.g., sidewalks, pedestrian crosswalk signals and markings, trails, and secure bicycle parking) and user amenities (e.g. paved waiting areas, bus shelters and route/schedule information) to make transit services and facilities more convenient and attractive.
- Policy h. Provide for effective management and maintenance of County-owned transportation facilities, including park-and-ride lots, bus garages, and FAIRFAX CONNECTOR vehicles.
- Policy q. Seek to establish, with assistance of all employers, including the private sector and all levels of government, incentives and disincentives in order to reduce single occupant automobile use. These might include flexible and alternative work schedules, transit pass programs, dedicated bus/van transportation between employment centers and designated transit centers, alternative parking arrangements, provisions for adequate sidewalks and trails, and related measures to promote transit ridership, ridesharing, bicycling, and walking.
- Policy r. Work with Fairfax County Public Schools, private schools, and area colleges to establish programs for encouraging the use of bicycling, walking, carpooling and transit, including school buses.
- Policy t. In cooperation with MWCOG and other local jurisdictions, develop on demand carpooling/ridesharing system. Actively promote and market public transit, ridesharing, bicycling, and walking.
- Transportation, Objective 4. "A comprehensive network of trails and sidewalks should be provided as an integral element of the overall transportation network.
- Policy a. Plan for pedestrian, bicycle and bridle path/hiking trail system components in accordance with the Countywide Trails Plan.
- Policy c. Provide for bicycle and pedestrian features, including clearly marked sidewalks and trails, and marked crosswalk and pedestrian signals, in the construction and reconstruction of roads and bridges.
- Policy d. Establish trails and/or sidewalks in conjunction with roads and stream valleys as indicated by the Countywide Trails Plan.
- Policy e. Provide sidewalks and/or trails which link residential concentrations with transit stations, mixed-use centers, shopping districts, recreational facilities, and major public facilities, and provide for pedestrian circulation within mixed use centers.
- Policy f. Provide sidewalks on both sides of streets in commercial areas.
- Policy g. Use open space/conservation easements where appropriate to implement the Countywide Trails Plan.
- Transportation, Objective 8. "Public safety should be ensured both for users of transportation facilities and services and for the general public."

Policy g. Reduce conflicts among pedestrians, bicyclists, and motorists and correct unsafe conditions for walking and bicycling.

Revitalization, Objective 2. "Fairfax County should address long term infrastructure financing needs in designated Revitalization Areas recognizing that additional tax revenues are generated by revitalization projects.

Policy b. Identify and capitalize infrastructure improvements that complement and sustain the revitalization efforts.



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